UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,305	08/22/2003	Hisasi Goto	1118.68269	9206

7590   09/19/2006

Patrick G. Burns, Esq.
GREER, BURNS & CRAIN, LTD.
300 South Wacker Dr., Suite 2500
Chicago, IL   60606

EXAMINER
MAHMOOD, REZWANUL

ART UNIT	PAPER NUMBER
2164	

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _27 June 2006_.

2a)☒ This action is **FINAL.** 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-10_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-10_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

SAM RIMELL
PRIMARY EXAMINER

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This communication is in response to the amendment filed on June 27, 2006.

Response to Amendment

2.   Claims 1-10 are pending in this office action.

Response to Arguments

3.   Applicant's arguments filed with respect to claims 1-10 have been fully

considered but they are not deemed to be persuasive.

4.   In response to the applicant's arguments on independent claims 1 and 9, the

applicant argues that the prior arts do not disclose the features "a plurality of records

retrieved from a database on a server (a second computer system) are sent by and

manipulated by a client (a first computer system), and a log including the data

manipulations and the manipulated data is sent to the server so that the server reflects

the manipulations to the database, in order to minimize communication between the

client and server". The examiner responds that the prior arts in fact teach the features.

5.   In Column 5 lines 7-11, Toub discloses communications between a client and a

server and communicating interactive data-bound controls which contain plurality of

records. In Column 6 lines 64-67 Cohen discloses a log file which stores any updates

due to data manipulation. It would have been obvious from the combination of Toub and

Cohen for a log file to be generated while data received from the server side was being

manipulated at the client side as admitted by the applicant (Response: Page 20, lines 3-

4) and the log file to be communicated from the client side to the server side once the

manipulated data information is sent back to the server side database to minimize

communication between client and server..

6.   In response to applicant's argument regarding DHTML being a execution type

program, not a compiled code. The examiner responds that the claim language does

not discuss anything about what language(s) can be used for the method or program.

7.   In response to the applicant's arguments on independent claims 1, 9 and

dependent claim 4, the applicant argues that "Toub does not send data manipulations

about a plurality of records on the client at one time" and that "Toub does not suggest

updating a plurality of records at one time". The examiner responds that the Toub

reference does in fact teach the features.

8.·   The examiner notes that the feature of manipulating a plurality of records 'at one

time' or updating a plurality of records 'at one time' is not part of the applicant's claim

language. In Column 5 lines 57-67, Column 6 lines 1-9, and Figures 3-10 of Toub, it is

stated that plurality of controls are sent from the server to the client at one time, and it is

inherent that manipulating one control can manipulate multiple records at one time. And

in column 5 lines 51-56 of Toub it is disclosed once data has been modified, such

modification is communicated to the server.

9.   In response to the applicant's arguments on independent claims 1 and 9, the

applicant argues that "although the Cohen reference discloses a log file in which

changes to a database are stored, it is not predicted on a remote access to the

database. Therefore, Cohen does not discloses communications between a client and a

server". The applicant further argues that "Cohen does not store an update log when it

is unnecessary to increase access efficiency. The log file of Cohen stores a history of

actual updates to the database. This is different from the logs of claims 1 and 9, which

store manipulations to the database objects on the client that are not manipulations to

the actual database on the server. Therefore, if the log file of Cohen were applied to the

method of Toub, a history of the interactive manipulations of Toub might be stored in the

log file. However, it would not have been obvious from the combination that the

manipulations to the database objects on the client could be stored in a log, and that the

server could update the database on the basis of the log and the manipulated database

object". The examiner argues that the prior arts in fact teach the features.

10.   In response to applicant's argument, to combine the references, the examiner

recognizes that obviousness can only be established by combining or modifying the

teachings of the prior art to produce the claimed invention where there is some

teaching, suggestion, or motivation to do so found either in the references themselves

or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*,

837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21

USPQ2d 1941 (Fed. Cir. 1992).

"Test of obviousness is not whether features of secondary reference may be

bodily incorporated into primary reference's structure, nor whether claimed invention is

expressly suggested in any one or all of references; rather, <u>test is what combined</u>

<u>teachings of references would have suggested to those of ordinary skill in art</u>."

In re Keller, Terry, and Davies, 208 USPQ 871 (CCPA 1981).

"Reason, suggestion, or motivation to combine two or more prior art references in

single invention may come from references themselves, from knowledge of those skilled

in art that certain references or disclosures in references are known to be of interest in

particular field, or from nature of problem to be solved;" Pro-Mold and Tool Co. v. Great

Lakes Plastics Inc. U.S. Court of Appeals Federal Circuit 37 USPQ2d 1626 Decided

February 7, 1996 Nos. 95-1171, -1181

"[q]uestion is whether there is something in prior art as whole to suggest

desirability, and thus obviousness, of making combination." Lindemann Maschinenfabrik

GMBH v. American Hoist and Derrick Company et al. U.S. Court of Appeals Federal

Circuit 221 USPQ 481 Decided Mar. 21, 1984 No 83-1178.

11.   In Column 5 lines 7-11, Toub discloses communications between a client and a

server, and in Column 6 lines 64-67 Cohen discloses a log file which stores any updates

due to data manipulation. It would have been obvious from the combination of Toub and

Cohen for a log file to be generated while data received from the server side was being

manipulated at the client side as admitted by the applicant (Response: Page 20, lines 3-

4) and the log file to be communicated from the client side to the server side once the

manipulated data information is sent back to the server side database. The suggestion

or motivation would be to store operations/manipulations so that the

operations/manipulations can be re-performed or undone to restore the contents to its

pre-failure state after a failure (Cohen: Column 2, lines 23-38).

Claim Rejections - 35 USC § 103

12.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

13.   Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Toub (US Patent 6,674,450) in view of Cohen (US Patent 5,903,898).

14.   With respect to claim 1, Toub discloses a method for persisting data

manipulations in a transaction processing system that consists of a first computer

system issuing a data manipulation request to a database having a plurality of records

and a second computer system accessing said database according to said data

manipulation request (Toub: Column 5, lines 7-11; Column 4, lines 9-29; Figure 2), said

method comprising:

a step where said first computer system designates a search condition,

requesting said second computer system to retrieve records that satisfy said search

condition from said database; a step where said second computer system retrieves all

records that satisfy said search condition designated by said first computer system from

said database, sending the contents thereof back to said first computer system (Toub:

Column 5, lines 7-11);

a step where said first computer system executes preset data manipulations on a

memory to said database object, which corresponds to contents of records retrieved by

said second computer system (Toub: Column 5, lines 30-35).

However, Toub does not disclose expressly recording the contents of said data

manipulations into said memory as a log by a record;

The Cohen reference, however, discloses storing information changes made to

the database by data manipulation as a log file (Cohen: Column 5, lines 26-30; Column

6, lines 64-67; Column 7, lines 1-2).

At the time of the invention, it would have been obvious to a person of ordinary

skill in the art, to have added storing data manipulation records as a log file to the

method of data manipulation in a transaction processing system.

The suggestion or motivation of doing so would be to store database operations

so that the operations can be re-performed to restore the database to its pre-failure

state after a failure (Cohen: Column 2, lines 23-28).

Therefore, it would have been obvious to combine Toub with Cohen for the

benefit of a method of data manipulation with log records in a transaction processing

system.

For the remainder of claim 1, Toub in view of Cohen discloses the following:

a step where said first computer system stores the contents of said database object and said log after the data manipulations into a message, sending the message to the second computer system when all of said preset data manipulations to the database object are completed (Toub: Column 5, lines 51-56; Column 11, lines 4-30); and

a step where said second computer system accesses said database according to the contents of said log in said message received from said first computer system and the second computer system reflects said database object to said database (Toub: Column 11, lines 4-30).

15.   The following claims have the same suggestion or motivation as stated above in the rejection for claim 1.

16.   With respect to claim 2, Toub in view of Cohen discloses the data manipulation persisting method in a transaction processing system according to claim 1, wherein said first computer system only stores the database object whose contents are updated by said data manipulations and the database object that is added by said data manipulation in said massage to send it to the second computer system (Cohen: Column 2, lines 47-57; Toub: Column 5, lines 51-56).

17.   With respect to claim 3, Toub in view of Cohen discloses the data manipulation

persisting method in a transaction processing system according to claim 1, wherein said

first computer system stores contents of a database object after the final data

manipulation in said message to send it to said second computer system when a

plurality of data manipulations were executed for said database object (Cohen: Column

2, lines 47-57; Toub: Column 5, lines 51-56).

18.   With respect to claim 4, Toub in view of Cohen discloses the data manipulation

persisting method in a transaction processing system according to claim 3, wherein said

first computer system stores contents of only one log, which is needed to reflect said

database object stored in said massage to said database, in said message when a

plurality of data manipulations were executed for said database object (Cohen: Column

2, lines 61-63).

19.   With respect to claim 5, Toub in view of Cohen discloses the data manipulation

persisting method in a transaction processing system according to claim 4, wherein said

first computer system stores one update log and contents after the final update in said

massage with respect to a predetermined database object when update was repeated

to said database object (Cohen: Column 2, lines 47-52).

20.   With respect to claim 6, Toub in view of Cohen discloses the data manipulation

persisting method in a transaction processing system according to claim 4, wherein said

first computer system stores one insertion log and contents after the update in a

message with respect to a predetermined database object when update was executed

after insertion for said database object (Cohen: Column 2, lines 47-52).

21.   With respect to claim 7, Toub in view of Cohen discloses the data manipulation

persisting method in a transaction processing system according to claim 4, wherein said

first computer system stores one deletion log in said massage and does not store

contents with respect to a predetermined database object when deletion was executed

after update for said database object (Cohen: Column 2, lines 35-63; Cohen: Column 3,

lines 32-35).

22.   With respect to claim 8, Toub in view of Cohen discloses the data manipulation

persisting method in a transaction processing system according to claim 4, wherein said

first computer system does not store a log and contents with respect to a predetermined

database object when deletion was executed after insertion for said database object

(Cohen: Column 3, lines 32-35; Column 2, lines 35-46).

23.   With respect to claim 9, Toub in view of Cohen discloses a data manipulating

program for a remote database comprising:

   a first step where a client computer, which communicates with a server computer

accessing a database to execute transaction for said database, designates a search

condition, requesting said server computer to retrieve records that satisfy said search

condition from said database (Toub: Column 5, lines 7-11);

a second step where said client computer executes preset data manipulations on

a memory to an database object, which corresponds to contents of the records retrieved

by said server computer, recording the contents of the data manipulations into said

memory as a log by a record (Toub: Column 5, lines 30-35; Cohen: Column 5, lines 26-

30; Column 6, lines 64-67; Column 7, lines 1-2); and

a third step where said client computer stores the contents of said database

object and said log after said data manipulations into a message, sending said message

to said server computer, thereby requesting to reflect said database object to said

database when all of said preset data manipulations to said database object are

completed (Toub: Column 5, lines 51-56; Column 11, lines 4-30).

24. With respect to claim 10, Toub in view of Cohen discloses the data manipulating

program for a remote database according to claim 9, wherein modules that make said

client computer execute said first and second steps are programmed to vary from one

business content to another, and wherein a module that makes said client computer

execute said third step is programmed to be common to all business contents (Toub:

Column 4, lines 63-67; Column 5, lines 1-56).

Conclusion

25. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

26. The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. The Carlson reference (US Publication 2005/0278316) teaches

about data manipulation between first and second computer connected with a database.

The Cameron reference (US Publication 2002/0174136) teaches about transaction log

files.

Contact Information

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Rezwanul Mahmood whose telephone number is

(571)272-5625. The examiner can normally be reached on m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Charles Rones can be reached on (571)272-4085. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rezwanul Mahmood
Ph # 571-272-5625

SAM RIMELL
PRIMARY EXAMINER